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[0002] FIG. 1 is a block schematic diagram representing a floating gate transistor having a plurality of control gates, some of which are chemoreceptive.

[0003] FIG. 2 is a plan view of a the transistor of FIG. 1 coupled to microfluidic fluid channels.

[0004] FIG. 3 is a plan view of a chemoreceptive control gate for the transistor of FIG. 1.

[0005] FIG. 4 is a block diagram view of an array of chemoreceptive control gate transistors.

[0006] FIG. 5 is a block schematic diagram representing a further exemplary floating gate transistor having a chemoreceptive layer.

[0007] FIG. 6 is a perspective view of a CMOS chip incorporating a chemoreceptive transistor with a channel.

[0008] FIG. 7 is a block schematic diagram representing different width sensing gates.

[0009] FIG. 8 is a circuit diagram showing circuitry for indicating subthreshold-slope variation.

As can be seen from these descriptions, FIG. 1 includes some chemoreceptive control gates, and FIG. 5 is a floating gate transistor having a chemoreceptive layer. The Figures are merely different representations of the same thing. One is more of a circuit type diagram, while the other shows structure. The corresponding claims, however, are very similar, and no additional burden is imposed by examining them together.

In the Detailed Description, FIG. 1 description includes the following text: "In one embodiment, the control gates 130, 135 and 140 comprise fingers that are coated with a chemoreceptive material,..." This language meets the chemoreceptive layer language of the description of FIG. 5. Thus, it is requested that at least claims 1-4, 10-15 and 23-25 be examined as a single species. Further, claim 1 appears generic to all of the Figures, and if allowed, should result in the allowance of the unelected claims.

Applicant reserves the right to file divisional application(s) on the non-elected species.

RESPONSE TO RESTRICTION REQUIREMENT

Serial Number: 10/695,432 Filing Date: October 28, 2003

Title: CHEMORECEPTIVE SEMICONDUCTOR STRUCTURE

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Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6972 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date	3-	2-	200	5
Date		_		_

By Bradley A Forrest

Reg. No. 30,837

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P. Box 1450, Alexandria, VA 22313-1450 on this _______ day of March, 2005.

Name

Signature